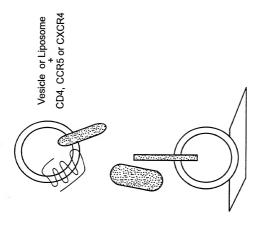
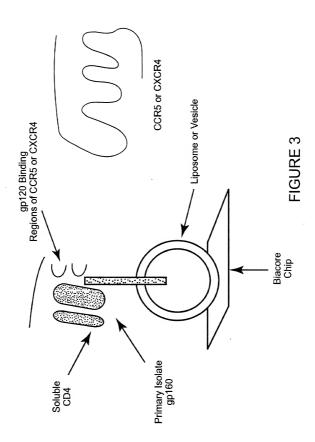


FIGURE 1



Vesicle or Liposome or Inactivated Hiv-1 Virion
+
Primary Isolate
gp160

FIGURE 2



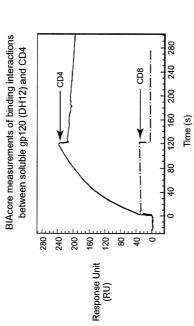


FIGURE 4

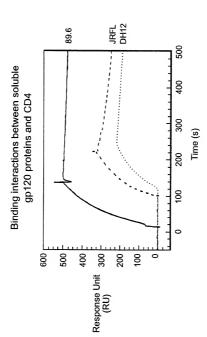


FIGURE 5

Kinetics and binding affinities of the interactions between pg120 and CD4

gp120	k <sub>a</sub> M <sup>-1</sup> s <sup>-1</sup> (on-rate)	k <sub>d</sub> ,s <sup>-1</sup> (off-rate)	δ≥	t <sub>1/2</sub> min
JRFL	6.0×10 <sup>3</sup>	8.84x10 <sup>-4</sup>	1.5x10 <sup>-7</sup>	4
DH12	4.9x10 <sup>3</sup>	3.86x10 <sup>-4</sup>	7.8x10 <sup>-8</sup>	30
9.68	4.6x10 <sup>3</sup>	8.48×10 <sup>-5</sup>	1.8×10 <sup>-8</sup>	136

## FIGURE 6

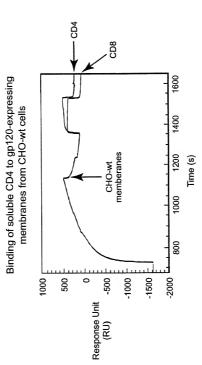


FIGURE 7

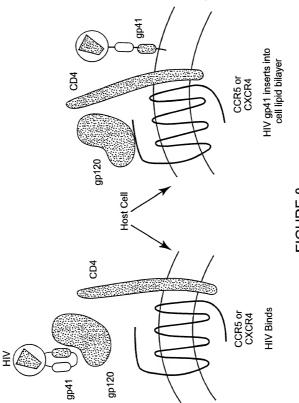


FIGURE 8

HIV fusion occurs in the absense of fusion inhibitory peptide

HIV fusion blocked by Dp178 or T649 peptides producing "frozen" fusion intermediate FIGURE 9

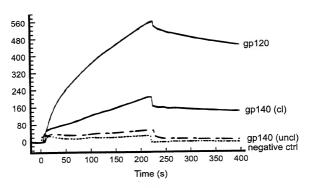


FIGURE 10A

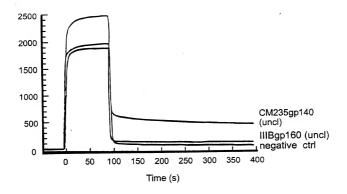


FIGURE 10B

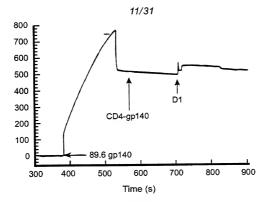


FIGURE 10C

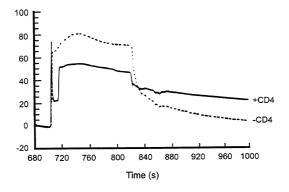
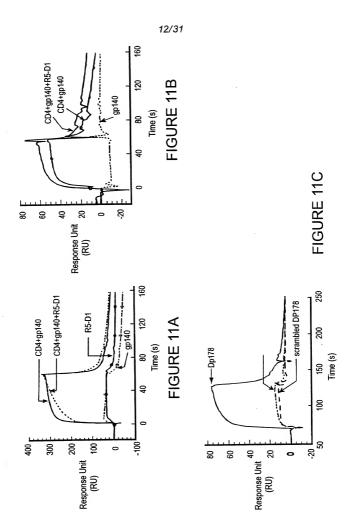


FIGURE 10D



89.6 gp140	Ka Kd M <sup>-1</sup> s <sup>-1</sup> s <sup>-1</sup>	K <sub>d</sub> s-1	k Kd	t <sub>1/2</sub>	~ 말
DP178 CD4+gp140 CD4+gp140+R5-D1 gp140+R5-D1	7.9X10 <sup>3</sup> 5 3.47X10 <sup>3</sup> 3 nm n	5.6X10 <sup>-3</sup> 3.86X10 <sup>-3</sup> nm nm	0.7 1.1 nm nm	124 180 nm nm	320 328 38 35
T694QL CD4+gp140 CD4+gp140+R5-D1 gp140+R5-D1 gp140	6.2X10 <sup>3</sup> 1 5.1X10 <sup>3</sup> E	1.46X10 <sup>-2</sup> 5.3X10 <sup>-3</sup> nm nm	2.4 1.0 nm	48 131 nm nm	53 0 0

## FIGURE 11D

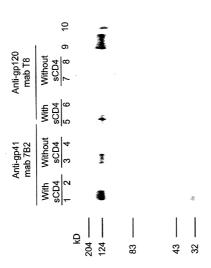
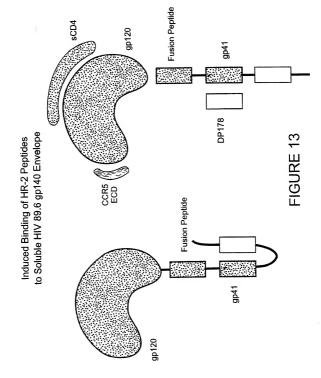
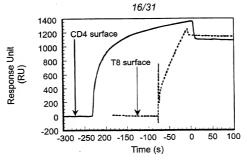


FIGURE 12





## FIGURE 14A

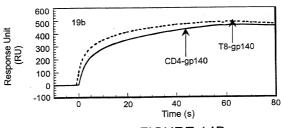


FIGURE 14B

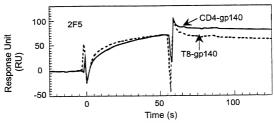
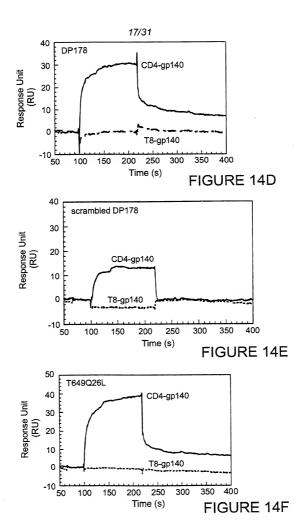
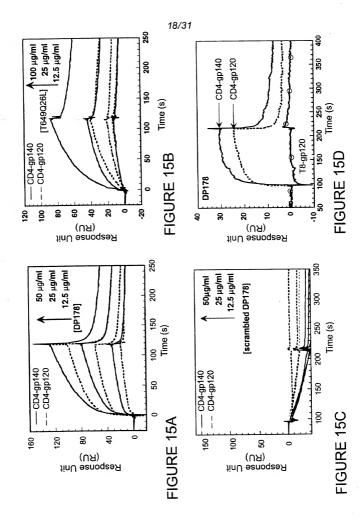


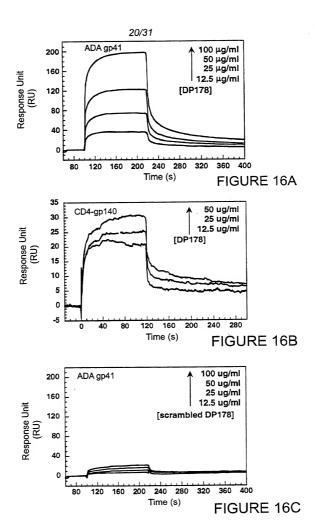
FIGURE 14C

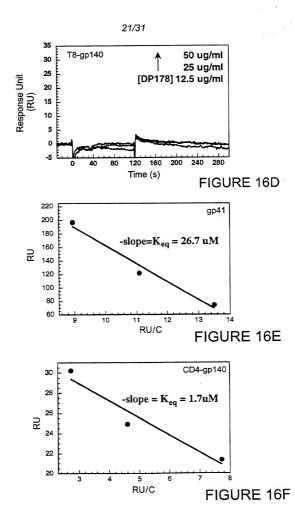




	kon M <sup>-1</sup> s <sup>-1</sup>	k <sub>off</sub> s-1	F. Ka	t1/2 s
<u>DP178</u>				
CD4-gp120	$0.75 \times 10^{3}$	$1.5x10^{-3}$	2.0	462
CD4-gp140	0.93x10 <sup>3</sup>	1.0x10 <sup>-3</sup>	<del>-</del>	693
T649Q26L				
CD4-gp120	1.26x10 <sup>3</sup>	3.2x10 <sup>-3</sup>	2.54	217
CD4-gp140	0.88x10 <sup>3</sup>	1.1×10 <sup>-3</sup>	1.20	630

FIGURE 15E





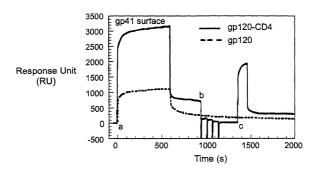


FIGURE 17A

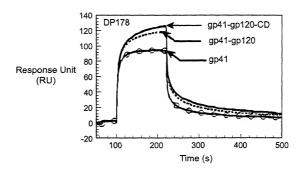


FIGURE 17B

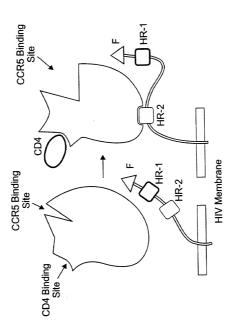


FIGURE 18

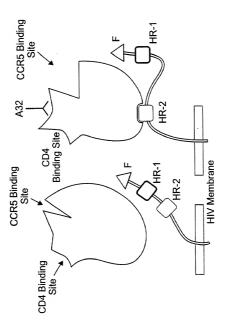


FIGURE 19

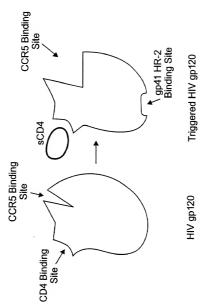


FIGURE 20

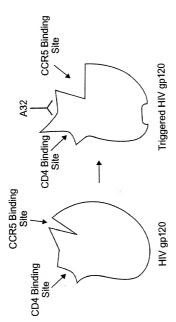
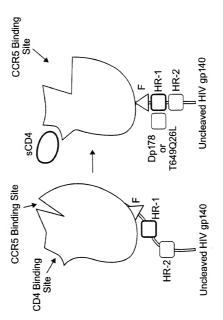


FIGURE 21



**FIGURE 22** 

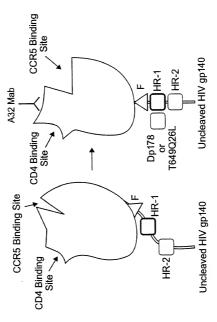


FIGURE 23

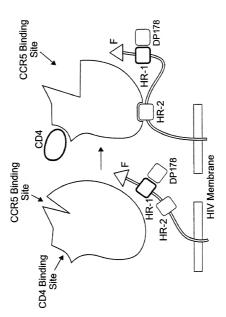


FIGURE 24

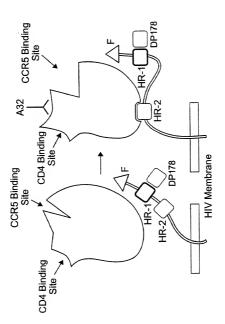


FIGURE 25

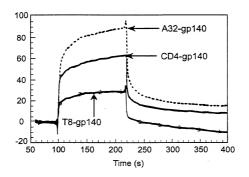


FIGURE 26